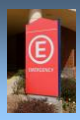
Southwest Regional Trauma Coordinating Committee:

Representing the Counties of:
San Luis Obispo – Santa Barbara
Ventura – Los Angeles – Orange

Southwest RTCC

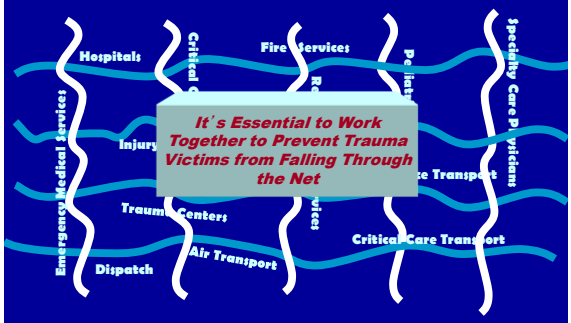
- Diverse Large Urban & Rural Areas
- Well Developed Trauma Systems
- New Trauma Systems
- 14,607 Sq. Miles
- 14,428,325 Total Population
- 27,247 Trauma Patients



Southwest RTCC

- Started in 2009
- Formed a Leadership Group
- Meetings/Conference Calls
- Good Representation & Participation
- Developed Strategic Plan
- Grand Rounds
- Improve access to trauma care

Each Thread in the Safety Net is Critical



Vision Statement

"All patients in the Southwest Region requiring emergency trauma services receive quality, accessible and well coordinated trauma care."

Mission Statement

"To promote a coordinated region-wide trauma system that reduces overall morbidity and mortality through prevention, comprehensive quality pre-hospital and hospital trauma care services that is cost-effective to individuals in Orange, Los Angeles, Ventura, Santa Barbara and San Luis Obispo Counties."

SW RTCC

Leadership:

- ***TC Med Dir. - Cryer, Lekewa***
- ***TC PM - Wobig, Hotz***
- ***TC Admin – Lorenz, Mussi***
- ***LEMSA MD – Salvucci, Stratton***
- ***LEMSA TPM – Haddock, Preston***
- ***LEMSA Dir. – Lapolla, Chidester***
- ***Non-TC Hospital vacant***
- ***HASC – Arcuri***
- ***Transport – Petrick, Osund***
- ***Cal-Chief – Miller***
- ***Peds & public health– Upperman, Fisher***
- ***General members, Carroll, Collins, Cleek, Lieberman,***

Project / Sub-Committees

- Access to Care
- Quality Improvement
- Data
- MCI/Disaster
- Pediatric
- State Trauma Plan

Access to Care:

- Goal: 1. Ensure access right hospital, right time. 2. Support distribution of TC optimal availability in region
- Objectives
  - Develop trauma system infrastructure (SLO, VTA & SB)
  - Assure adequate resources in LA & Orange
  - Align triage guidelines 5 counties
  - Develop standard interfacility transfer guidelines
  - Develop resource guide for specialty care centers

- Metrics
  - Prepare gap analysis/needs assessment
  - Process measurement
  - Outcome measurement
  - Create for state outcome measurement
- Clinical/System Case
  - Expected Improvements
  - No Preventable Deaths for trauma
  - Right Patient to right center

CQI

- **Goal 1. Assess, monitor and assure quality trauma care**
- **Objectives**
  - Establish regional PI process
  - Establish biennial trauma grand rounds explore extending to other regions
  - Identify and obtain data for system improvement
- **Metrics**
  - Prepare gag analysis/needs assessment
  - Identify QA activities and indicators

- **Clinical/System Case**
  - Expected Improvement
  - Appropriate level of trauma team activations

Data

- **Goal 1. Ensure validated regional data to drive PI process. 2. Compare SW RTCC data to State as available**
- **Objectives**
  - Ensure validated data collection at hospital level & define mechanism to compare data to state
  - Ensure adherence to trauma data dictionary
  - Develop template for internal data validation process
  - Develop criteria for trauma registrars

- **Metrics**
  - Prepare gag analysis/needs assessment

Clinical/System Case

- Not yet defined

MCI/Disaster

Goal 1. Ensure the regional trauma plan serves mass casualty events

- **Objectives**
  - Review and evaluate LEMSA patient distribution and MCI plans & policies
  - Develop a region-wide approach to large scale event

- **Metrics**
  - Prepare Gag analysis needs assessment
- **Clinical System Case**
  - Not yet defined

Pediatric Trauma

Goal Optimize pediatric care within the region

- **Objectives**
  - Complete and disseminate a white paper based on discussions outcomes for the Statewide pediatric summit
  - Establish a performance improvement process measure to review pediatric trauma access to designated Pediatric Trauma Centers.
- **Metrics**
  - Prepare Gag analysis needs assessment
- **Clinical System Case**
  - Not yet defined

State Trauma System

Goal Participate in and provide leadership, expertise and support for all aspects of trauma system development in California

- **Objectives**
  - Identify SW RTCC representation and participate on State TAC
  - Provide 2-way communication between STAC and the SW RTCC.
- **Metrics**
  - SW RTCC participation at STAC
  - Established communication between STAC & SW RTCC
- **Clinical System Case**
  - Not yet defined

Southwest RTCC

- What's working
  - Wealth of experience
  - Willingness to share expertise
  - Great people
  - Dedicated to improving trauma care & access
- Challenges
  - Distance for face-to-face meetings
  - Busy Schedule
  - Keeping groups motivated
  - Staff to work on key projects

What's working?

- RTCC Grand Rounds
- Open attendance from all trauma centers
- Each LEMSA presents case that represents a system problem
- Discussion
- Potential solutions identified
- Follow up presentations of success stories

Overview

- PREHOSPITAL SUMMARY: 63 year old male transferred in from Community Hospital (located about 20 minutes drive from the trauma center). Front seat passenger in MVA. Ambulatory to ED at Community Hospital, then became unresponsive. Found to have large EDH. Intubated at Community Hospital. Transferred in for higher level of care.

- Per Community Hospital notes:
- 1155: Arrived at Community Hospital
- 1256: Awaiting MD eval
- 1335: Pt unresponsive
- 1356: Attempting to intubate
- 1409: Awaiting anesthesiologist; combi-tube placed.
- 1420: Suctioned via combi-tube
- 1435: On vent
- 1515: CT scan
- 1557: 87/66; Levophed started
- 1647: Central line established
- 1800: Plan to transfer to trauma center
- 1840: ACLS paramedic transport

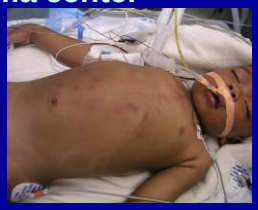
1954: Arrived in the Trauma Center. Right femoral triple lumen catheter in place. Left chest tube in place. 105/65, 100, 20, 99.8. GCS 3.

2105: To CT Scan. CT scan of the brain demonstrates depressed left temporal skull fracture with EDH and subfalcine, uncal and downward transtentorial herniation.

2155: Neurosurgery here to see patient. Irreversible coma with transtentorial herniation; grave prognosis noted.

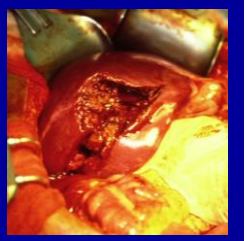
2223: To ICU. 119/78, 114, 20. Cerebral blood flow done. Results consistent with brain death.

2 year old assaulted taken to non trauma center



- BP 40/p
- Pulse 150
- Unresponsive
- Bruises abdomen
- Bruises head
- FAST positive
- Transferred to UCLA PICU
- Trauma service paged for consult

2 year old transferred to PICU

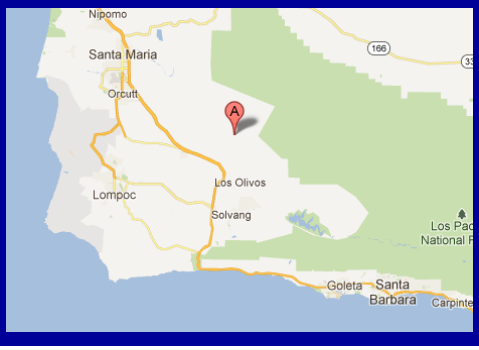


- Hemoperitoneum
- Grade 4 liver lac
- Grade 4 splenic lac
- Hematoma in Gerotas
- Repaired liver and splenectomy
- Post op head CT minimal SAH
- Good outcome but near miss!

Discussion

- Patients initially taken to the wrong hospital
- Delays in transfer process
- Transfer to wrong service
- How to fix?
- Orange county developed an immediate no questions asked transfer policy from ED to ED
- We adopted this idea in LA County within one year
- Other LEMSAs in our region are working out similar plans

4 patient MCI in rural area



Rural mini MCI

- Patient 1: TBI GCS 7 to ICU
- Patient 2: Hypotensive with seat belt sign to OR
- Patient 3: Multiple bruises stable sent home
- Patient 4: no complaints stable sent home
- Good outcome but stressed level II trauma center

Santa Barbara County

- Implementation of a pre-hospital triage tool using CDC criterion

The National Trauma Triage Protocol: Can this tool predict which patients with trauma will benefit from helicopter transport?

Joshua B. Brown, MD, Raquel M. Forsythe, MD, Nicole A. Stassen, MD, and Mark L. Gestring, MD, *Rochester, New York*

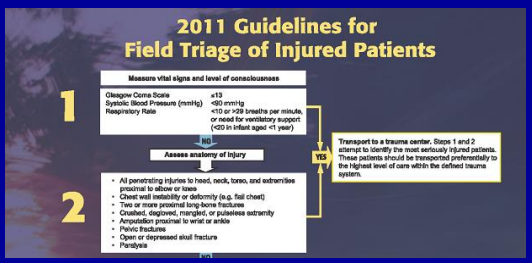
Journal of Trauma and Acute Care Surgery. 73(2):319-325, August 2012.

Validation of a Prehospital Trauma Triage Tool: A 10-Year Perspective

Mary-Anne Purtill, MD, Kent Benedict, MD, Tina Hernandez-Boussard, PhD, MPH, Susan I. Brundage, MD, MPH, Kristyn Kristopaitis, MD, John P. Sherck, MD, Adella Garland, MD, and David A. Spain, MD

Journal of Trauma-Injury Infection & Critical Care. 65(6):1253-1257, December 2008.

Santa Barbara County



Ventura County Medical Center

PRE-HOSPITAL COURSE

- 66 y/o M. involved in MCC at: 1401; + helmet. Traveling at 45 MPH
- Taken to non trauma hospital at: 1433
- Was maintaining airway, & GCS was 14
- Initial BP: 40/P; subsequent BP: 70/P
- FAST +
- C-spine films neg; CXR: Mult. L. sided rib fx
- VCMC received call at: 1525

PRE-HOSPITAL COURSE CONTINUED

- Accepted pt. Requested blood transfusion en-route
- En-route, BP: 70 -> 80/P
- Received 3U PRBC by the time of arrival at VCMC
- Tier I activation announced
- Arrived at: 1620

E.D. Course Continued

- Transported to OR
- Hgb: 7.8; INR: 1.4

O.R. Course

- Found 5L of hemoperitoneum -> Grade 5 splenic lac
- Prox. jejunal blowout
- Mult. small bowel contusions
- Pelvic hematoma
- Damage control open abd closure w/ LUQ packing
- Taken to ICU intubated
- Received 11U PRBC, 2 Jumbo FFP, 1 Plt

Next Grand Rounds

- October 2015
- Presentations of examples of system problems
- More importantly presentation of examples of fixes for problems identified last year
- Continue to learn from each other

What does not work?

- All the rest
- Unfunded mandate
- Subcommittee structure not supported
- Executive committee is made up of a few leaders but no infrastructure to get work done or disseminate information
- Open up membership to include all LEMSA administrators who can provide resources?
- We would love to have some ideas from the rest of you